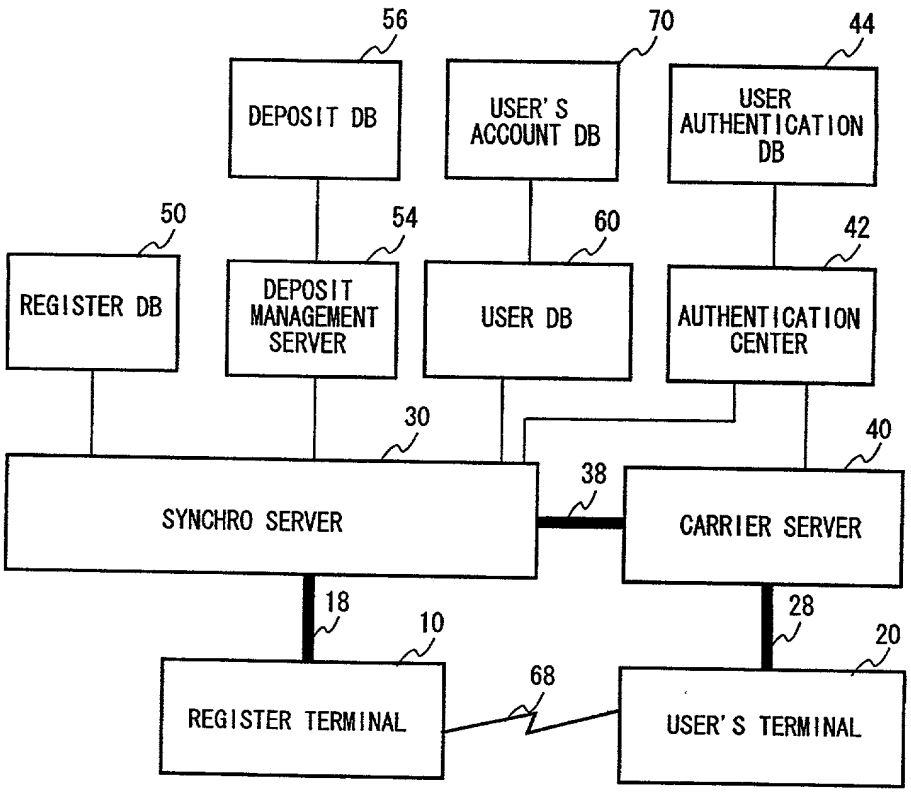
56
DEPOSIT DB
70
USER'S ACCOUNT DB
44
USER AUTHENTICATION DB
50
REGISTER DB
54
DEPOSIT MANAGEMENT SERVER
60
USER DB
42
AUTHENTICATION CENTER
30
40
38
SYNCHRO SERVER
CARRIER SERVER
18
10
28
20
68
REGISTER TERMINAL
USER'S TERMINAL

FIG. 1

NI-0002

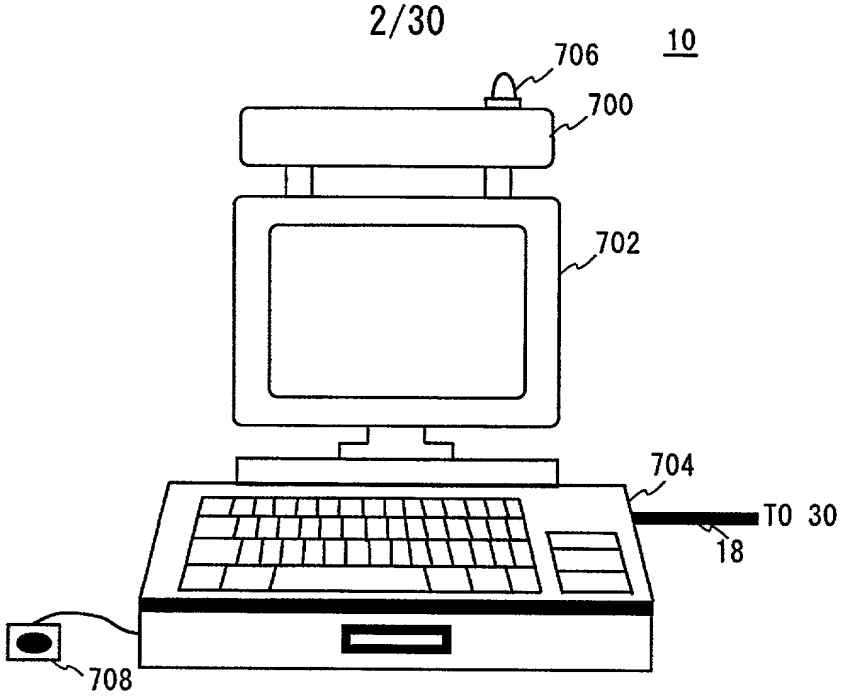

FIG. 2

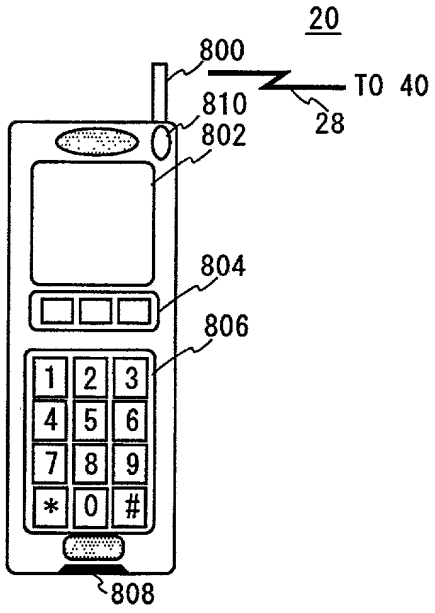

FIG. 3

NI-0002

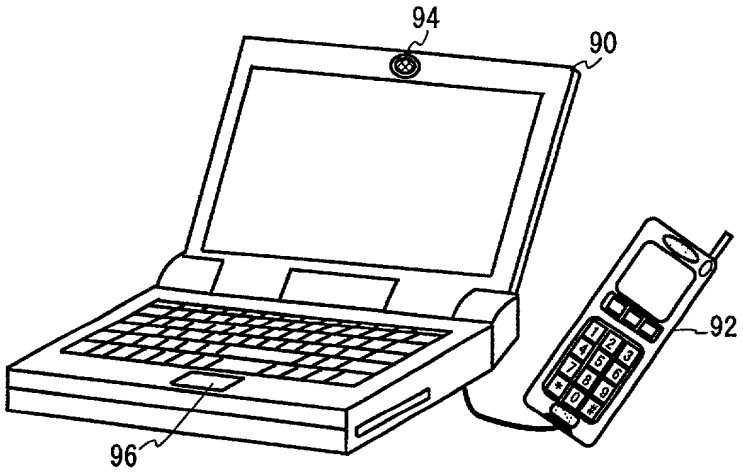

FIG. 4

NI-0002

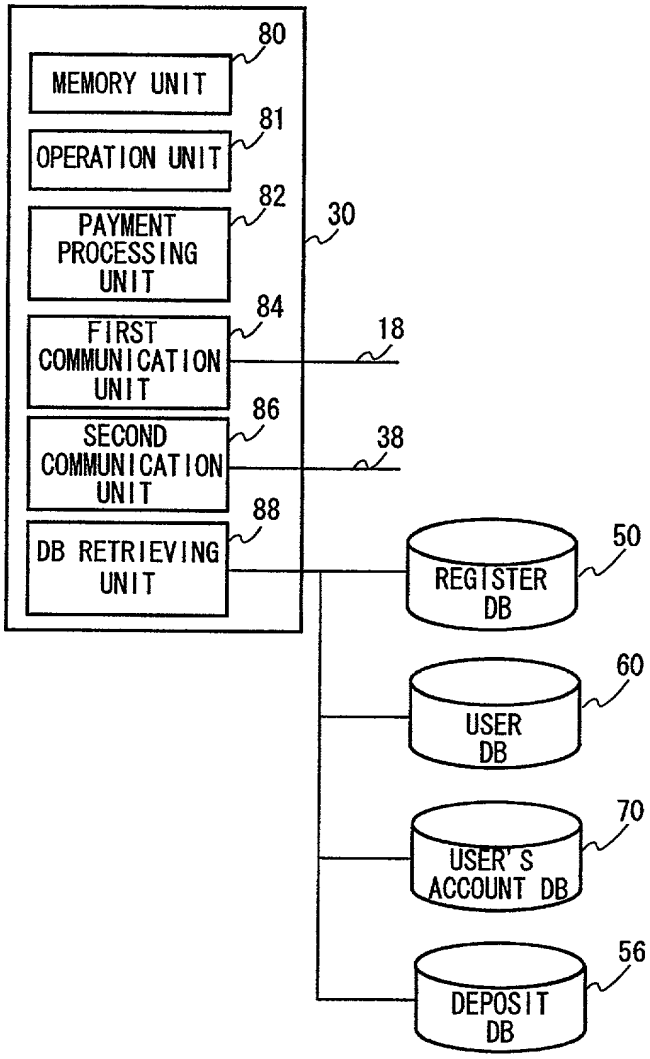
80
MEMORY UNIT
81
OPERATION UNIT
82
PAYMENT PROCESSING UNIT
30
84
FIRST COMMUNICATION UNIT
18
86
SECOND COMMUNICATION UNIT
38
88
DB RETRIEVING UNIT
50
REGISTER DB
60
USER DB
70
USER'S ACCOUNT DB
56
DEPOSIT DB

FIG. 5

NI-0002

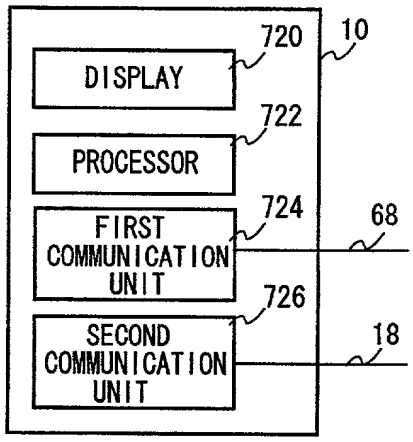

FIG. 6

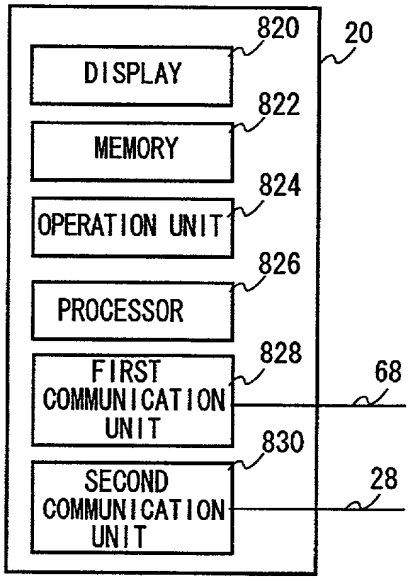

FIG. 7

NI-0002

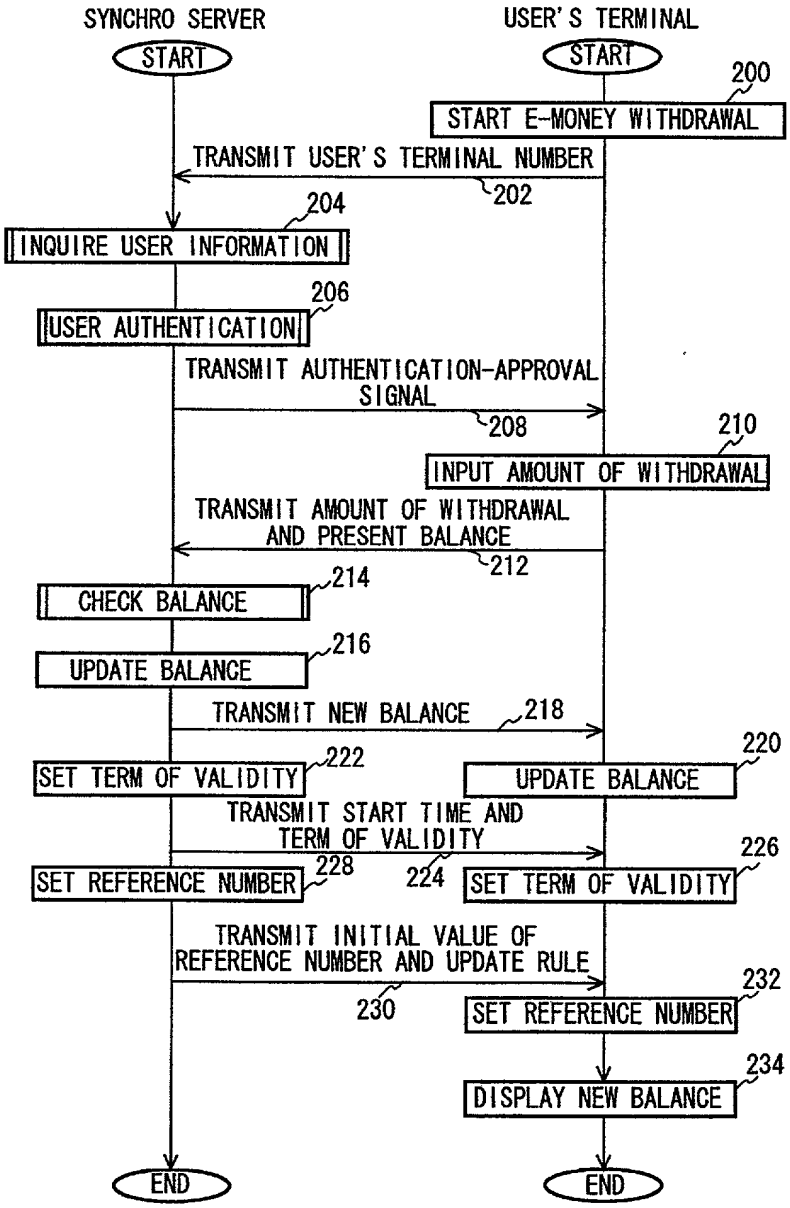
SYNCHRO SERVER
USER'S TERMINAL
START
START
200
START E-MONEY WITHDRAWAL
TRANSMIT USER'S TERMINAL NUMBER
202
204
INQUIRE USER INFORMATION
206
USER AUTHENTICATION
TRANSMIT AUTHENTICATION-APPROVAL SIGNAL
208
210
INPUT AMOUNT OF WITHDRAWAL
TRANSMIT AMOUNT OF WITHDRAWAL AND PRESENT BALANCE
212
214
CHECK BALANCE
216
UPDATE BALANCE
TRANSMIT NEW BALANCE
218
220
SET TERM OF VALIDITY
222
UPDATE BALANCE
TRANSMIT START TIME AND TERM OF VALIDITY
224
226
SET REFERENCE NUMBER
228
SET TERM OF VALIDITY
TRANSMIT INITIAL VALUE OF REFERENCE NUMBER AND UPDATE RULE
230
232
SET REFERENCE NUMBER
234
DISPLAY NEW BALANCE
END
END

FIG. 8

NI-0002

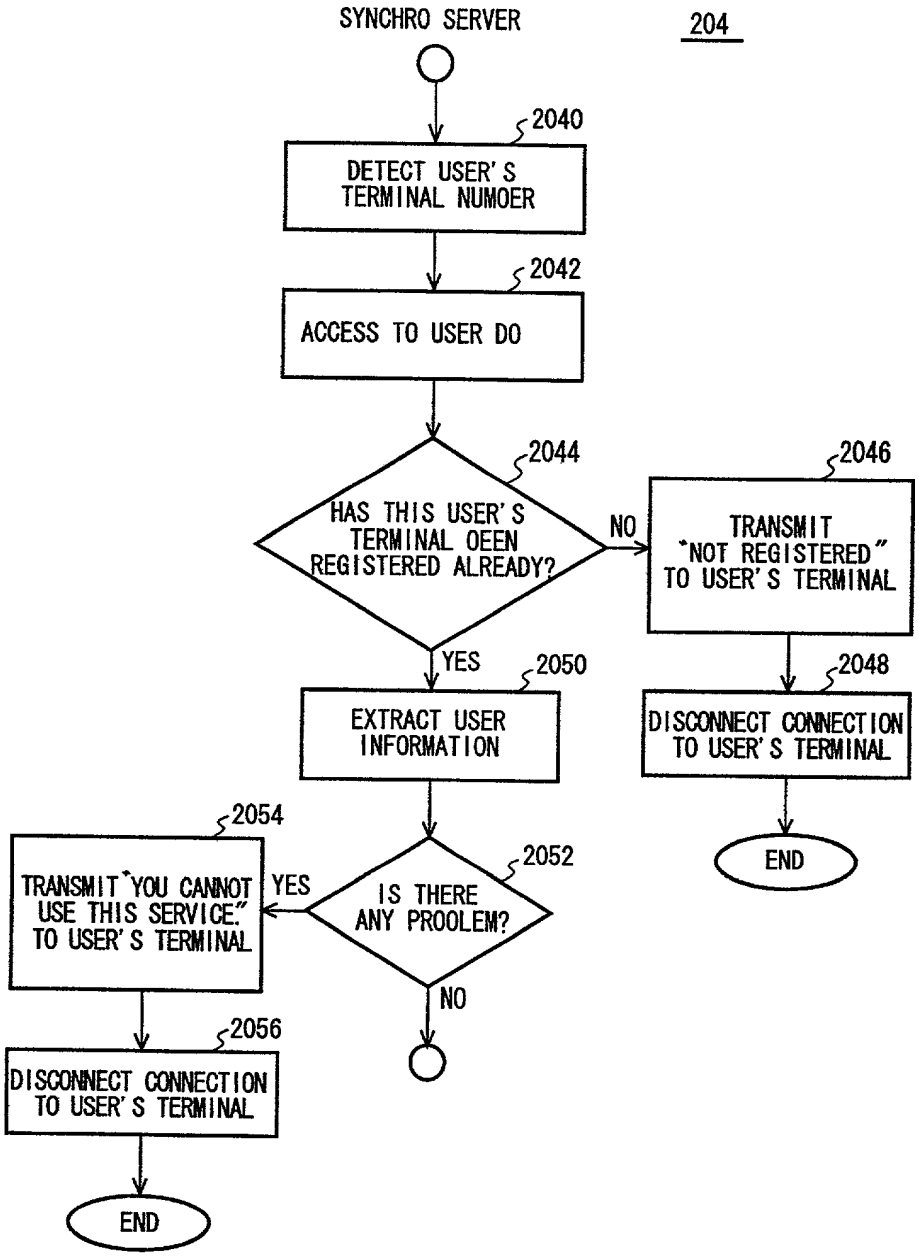
SYNCHRO SERVER
204
2040
DETECT USER'S TERMINAL NUMOER
2042
ACCESS TO USER DO
2044
HAS THIS USER'S TERMINAL OEEN REGISTERED ALREADY?
NO
2046
TRANSMIT "NOT REGISTERED" TO USER'S TERMINAL
2048
DISCONNECT CONNECTION TO USER'S TERMINAL
END
YES
2050
EXTRACT USER INFORMATION
2052
IS THERE ANY PROOLEM?
YES
2054
TRANSMIT "YOU CANNOT USE THIS SERVICE." TO USER'S TERMINAL
NO
2056
DISCONNECT CONNECTION TO USER'S TERMINAL
END

FIG. 9

NI-0002

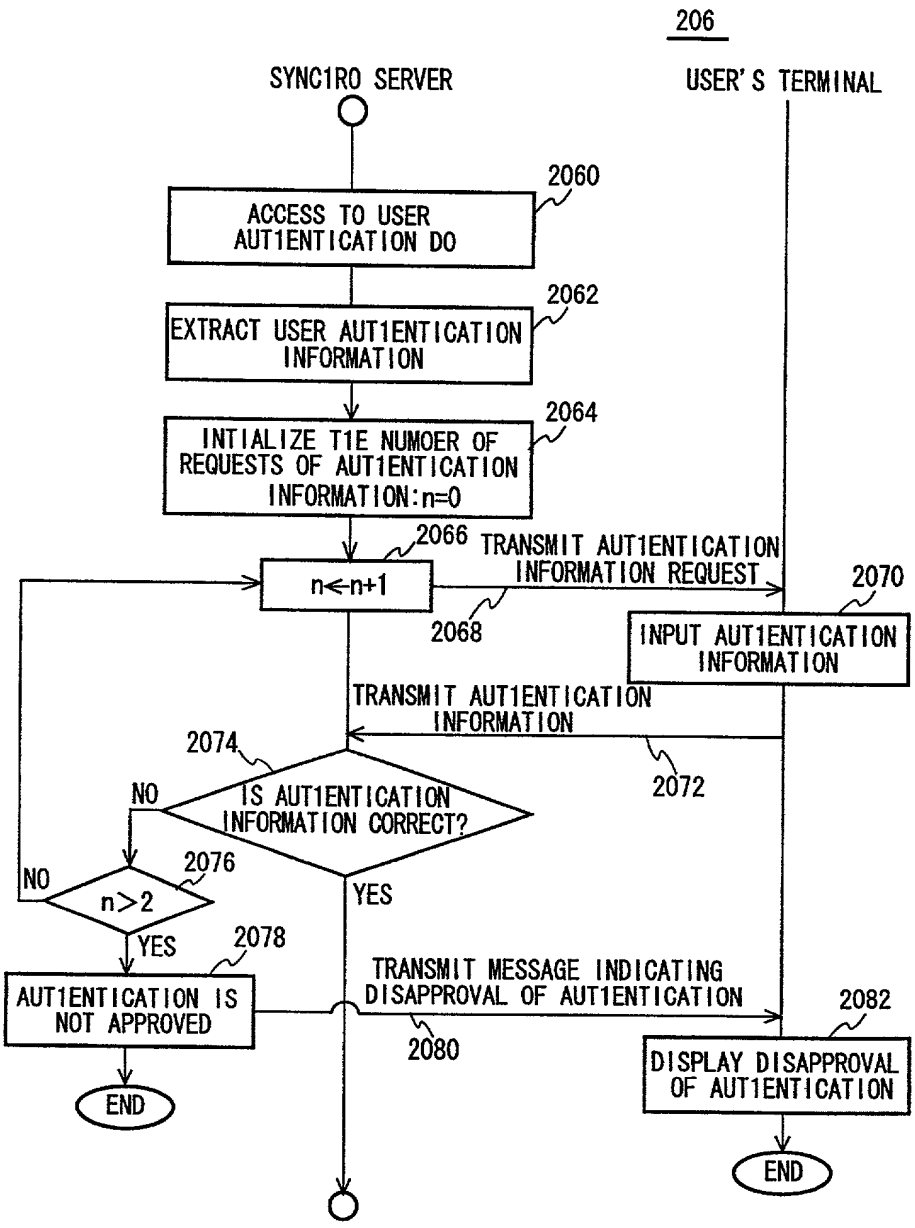

FIG. 10

NI-0002

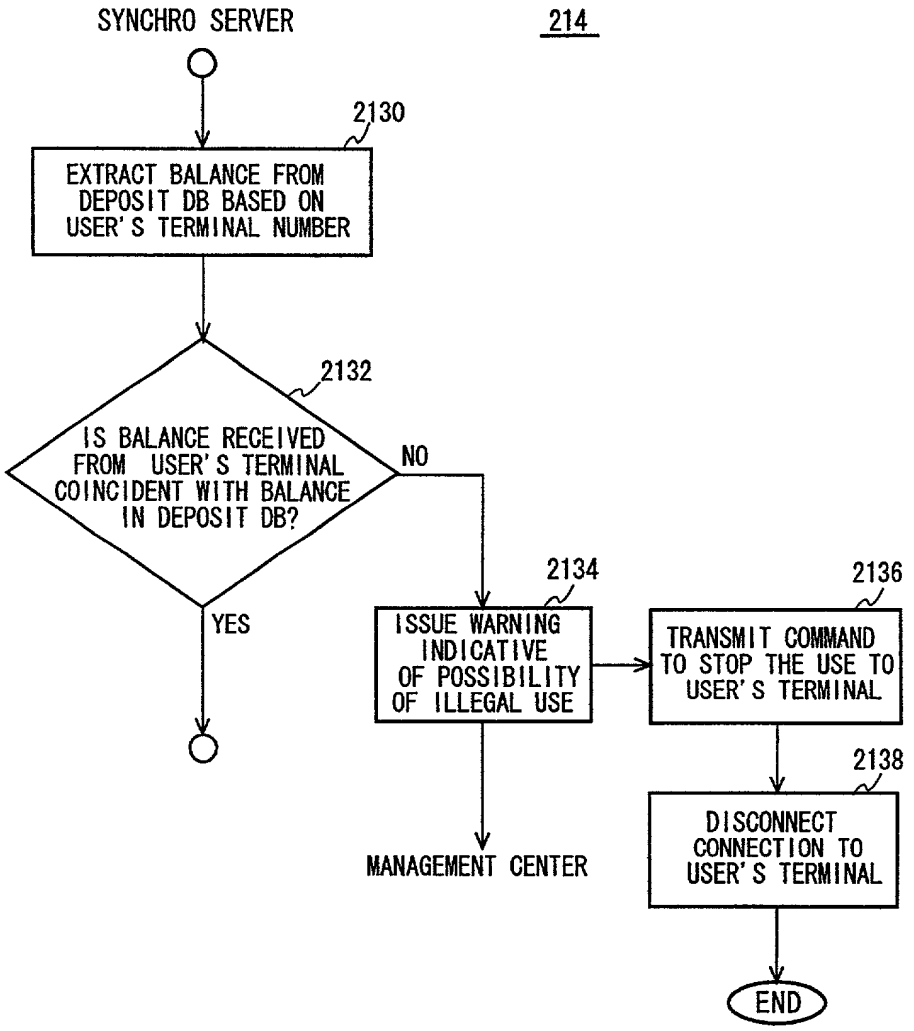

FIG. 11

NI-0002

n:TIME THAT HAS PASSED(MIN.) OR THE NUMBER OF USES	$\sqrt{2}$	$\sqrt{3}$	$\sqrt{5}$	$\sqrt{6}$ ← INITIAL VALUE
	n-TH DECIMAL PLACE NUMBER			
1	4	7	2	4
2	1	3	3	4
3	4	2	6	9
4	2	0	2	4
•	•	•	•	•
• •	LOOP OF 20 FIGURES	LOOP OF 30 FIGURES	LOOP OF 50 FIGURES	LOOP OF 60 FIGURES

FIG. 12

NI-0002

TIME THAT HAS PASSED (MIN.) OR THE NUMBER OF USES	2	7	4	1 ← INITIAL VALUE
1	1	2	6	4
2	2	3	7	5
3	1	4	6	8
4	9	7	3	4
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG. 13

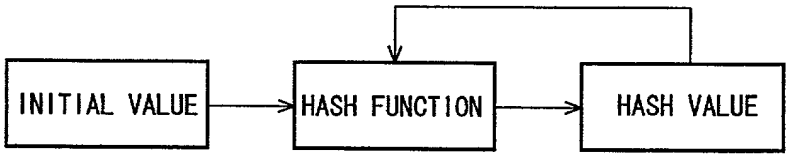

FIG. 14

NI-0002

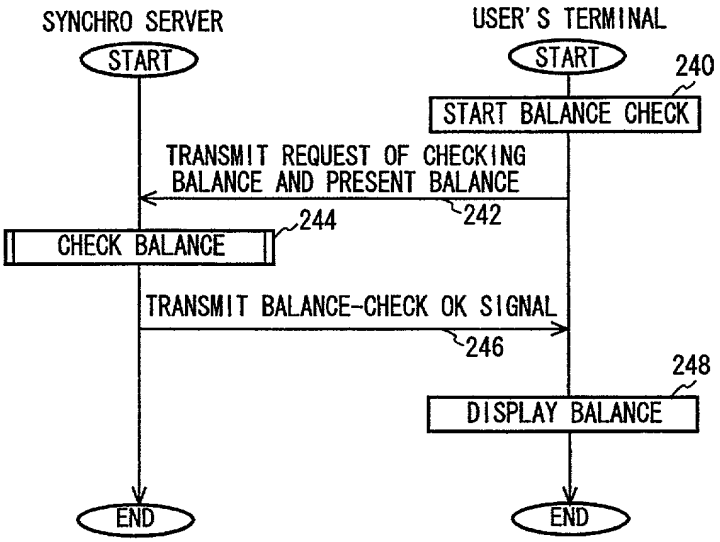

FIG. 15

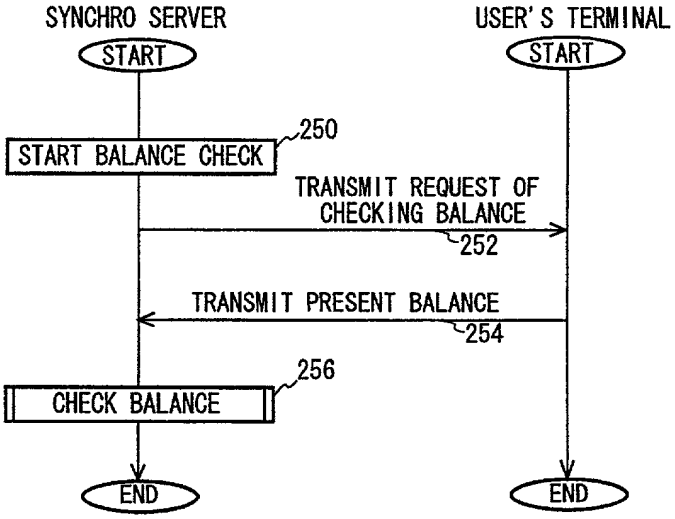

FIG. 16

NI-0002

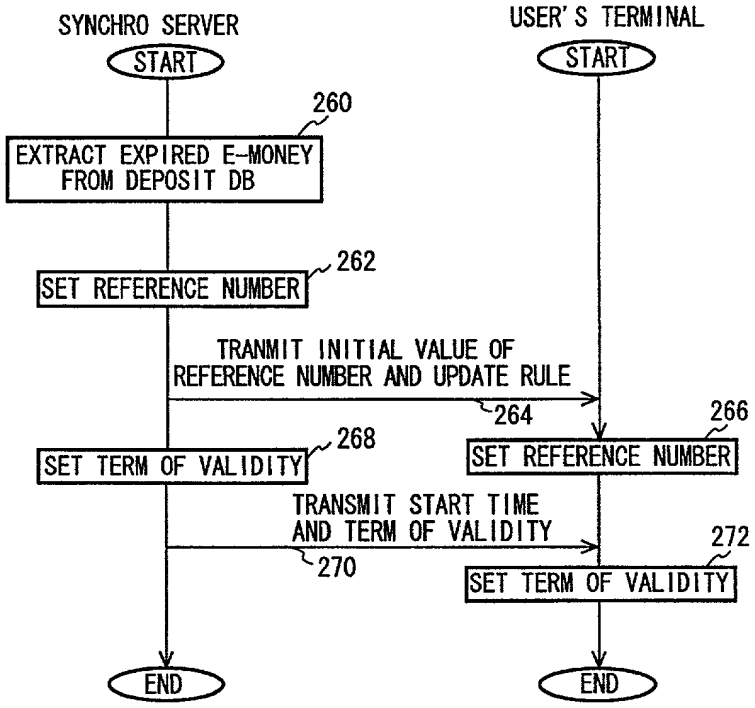

FIG. 17

NI-0002

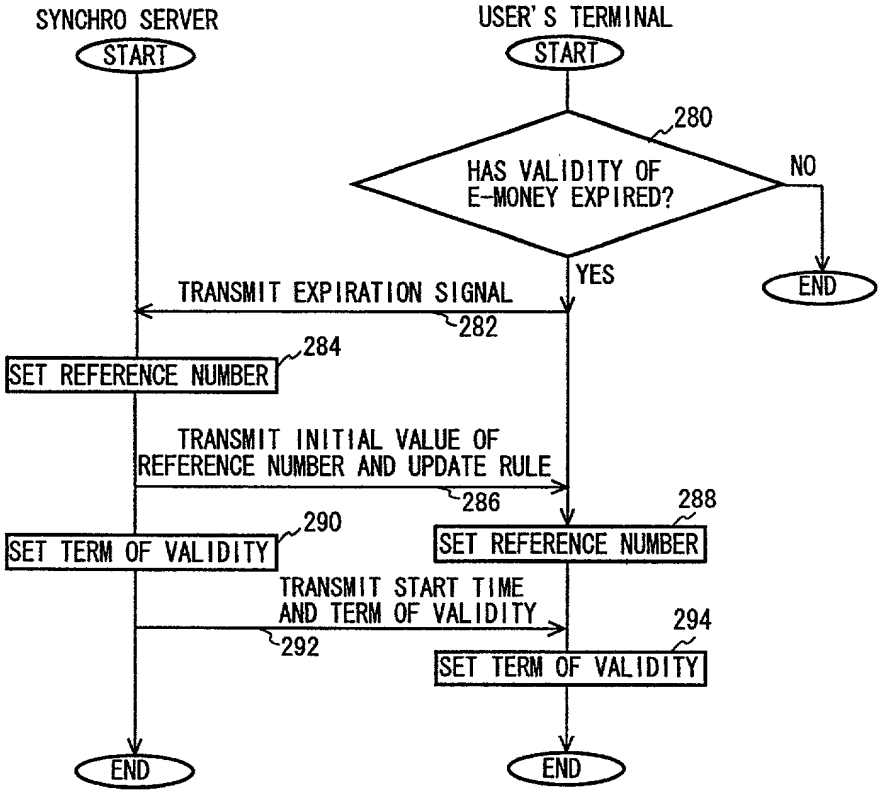

FIG. 18

NI-0002

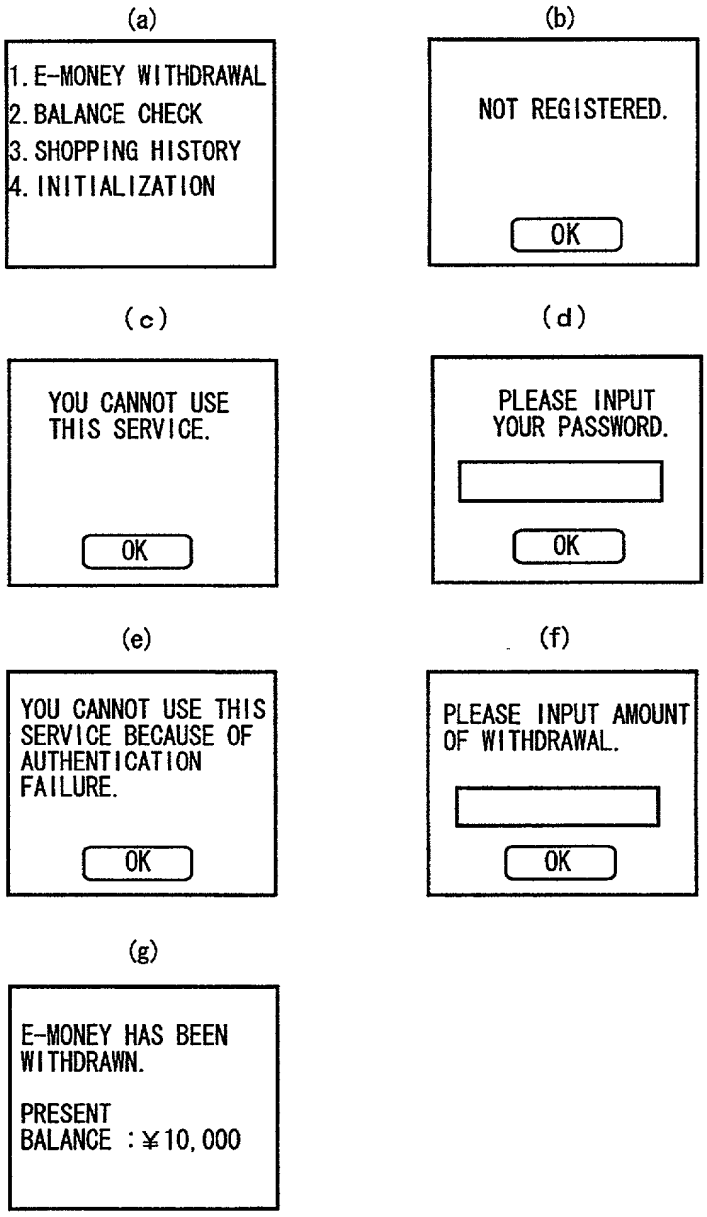

FIG. 19

NI-0002

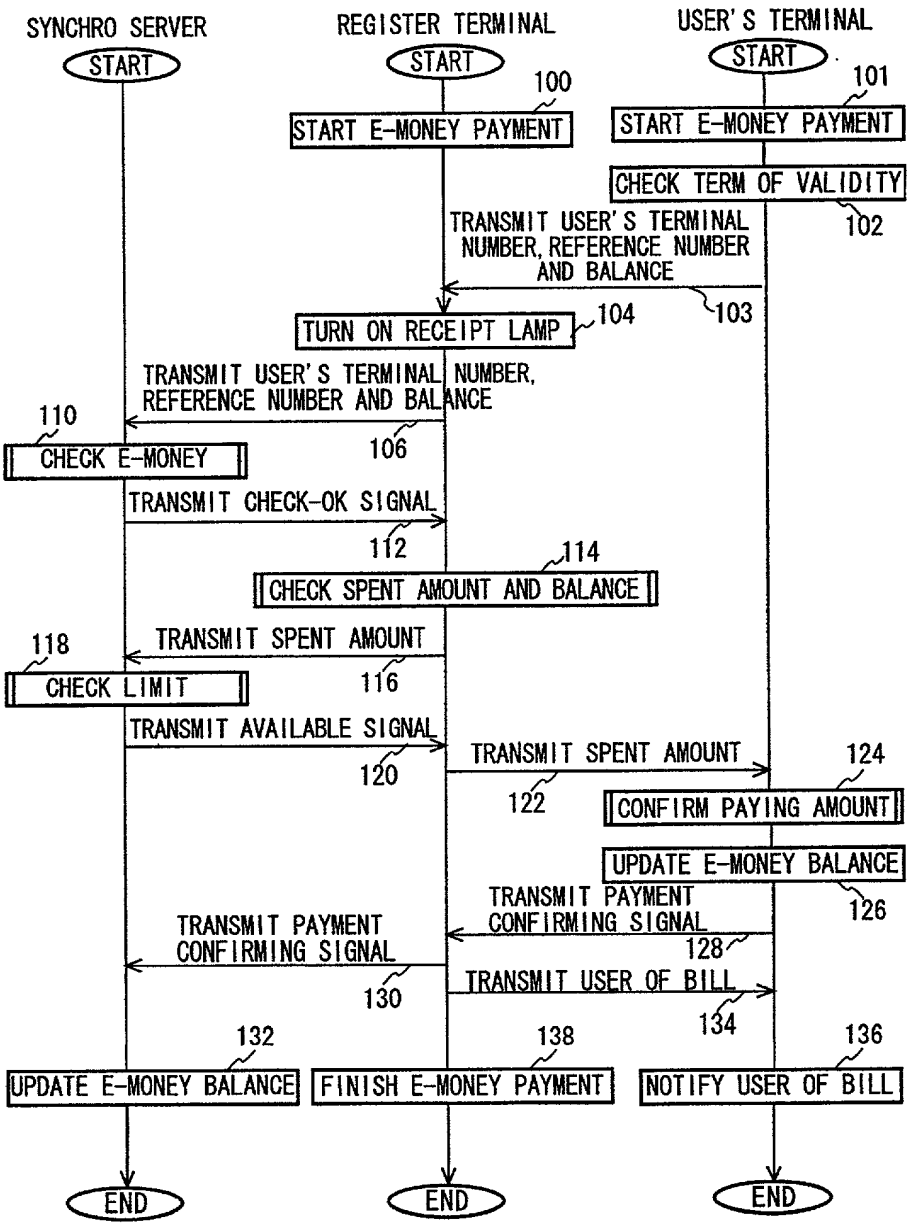

FIG. 20

NI-0002

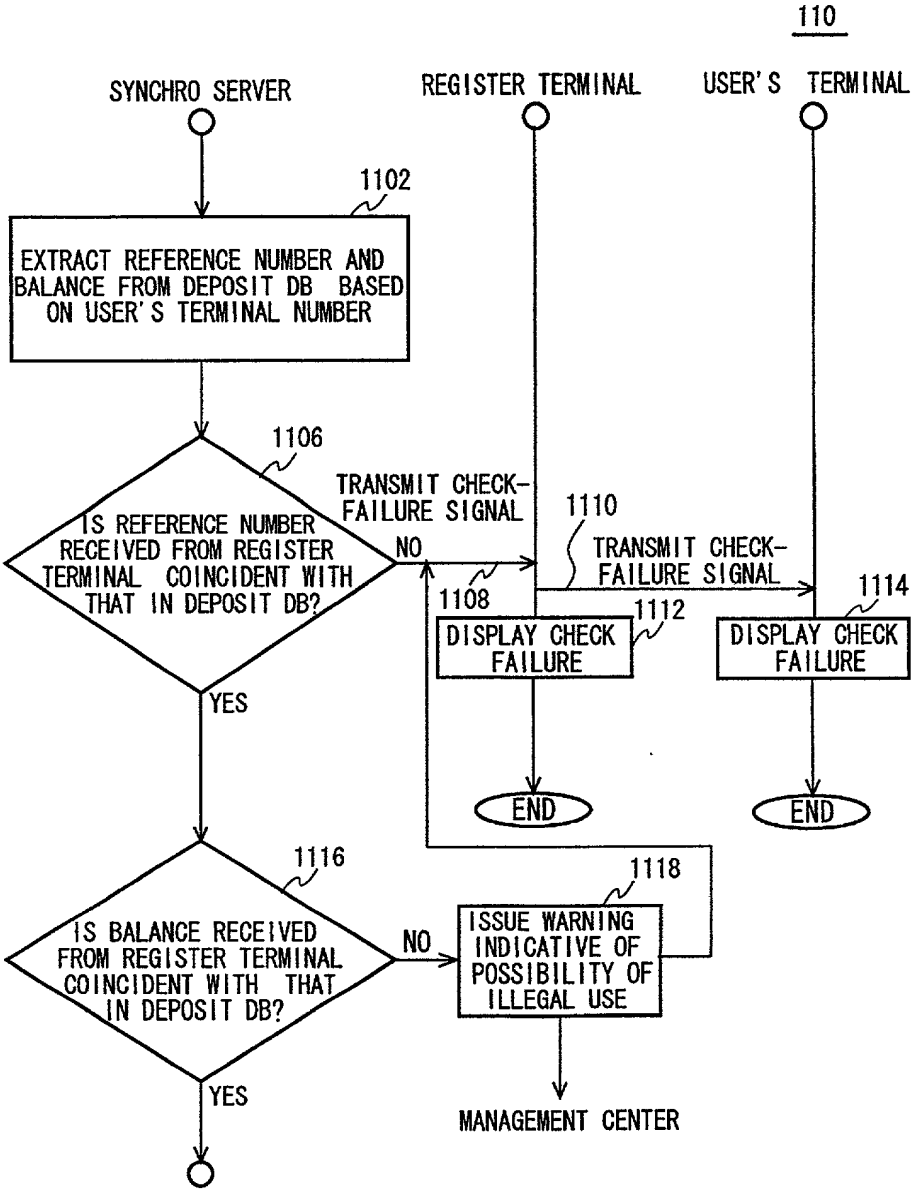

FIG. 21

NI-0002

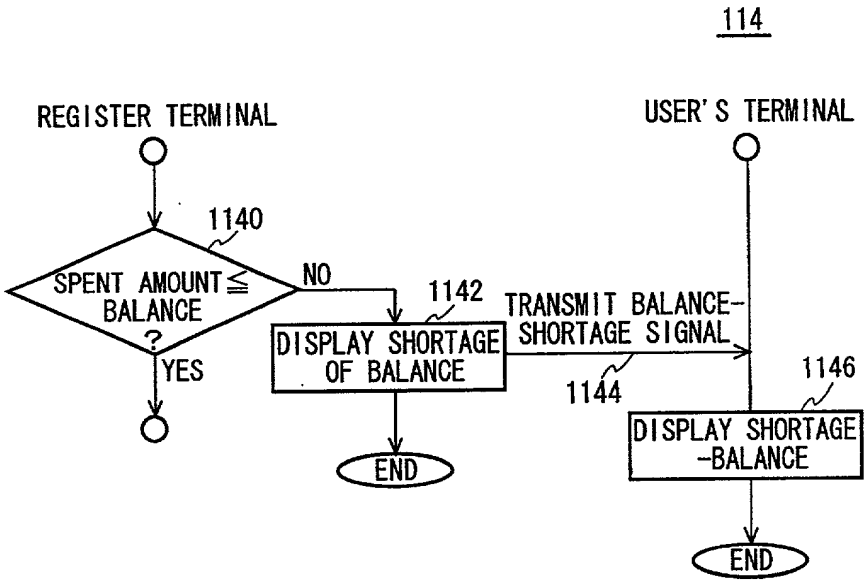

FIG. 22

NI-0002

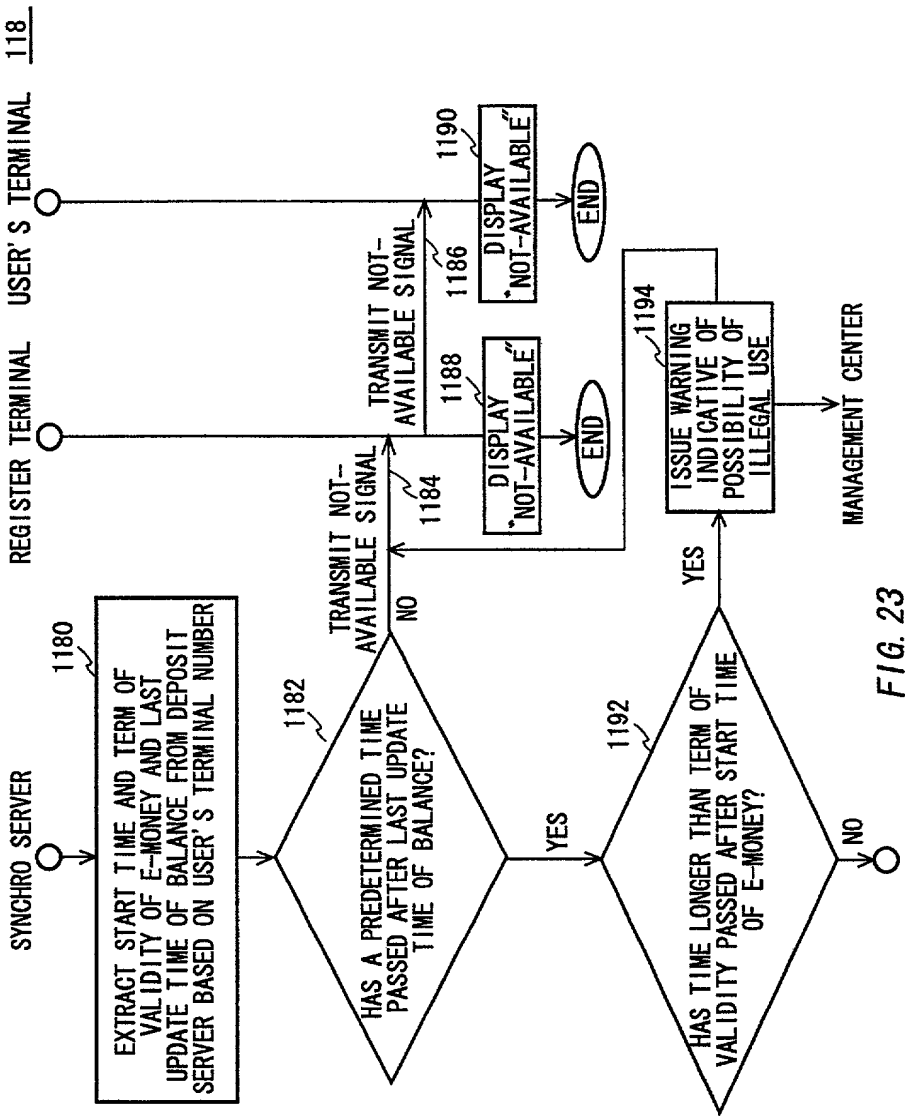

FIG. 23

NI-0002

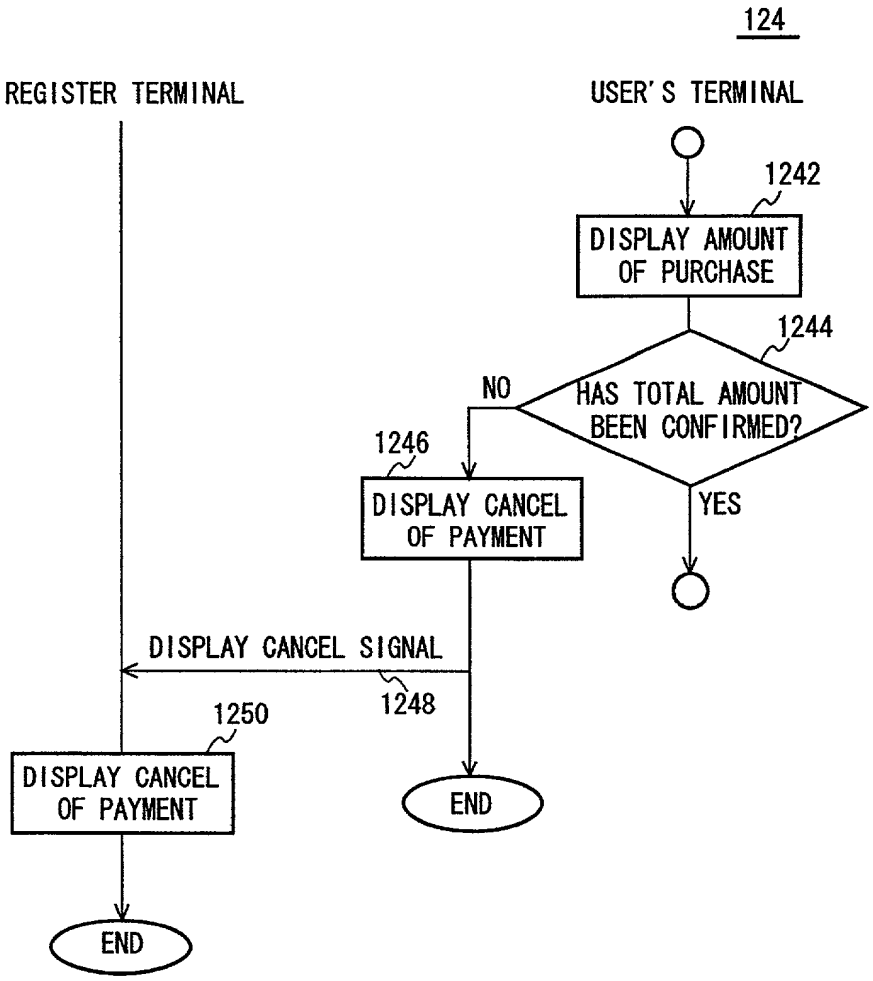

FIG. 24

NI-0002

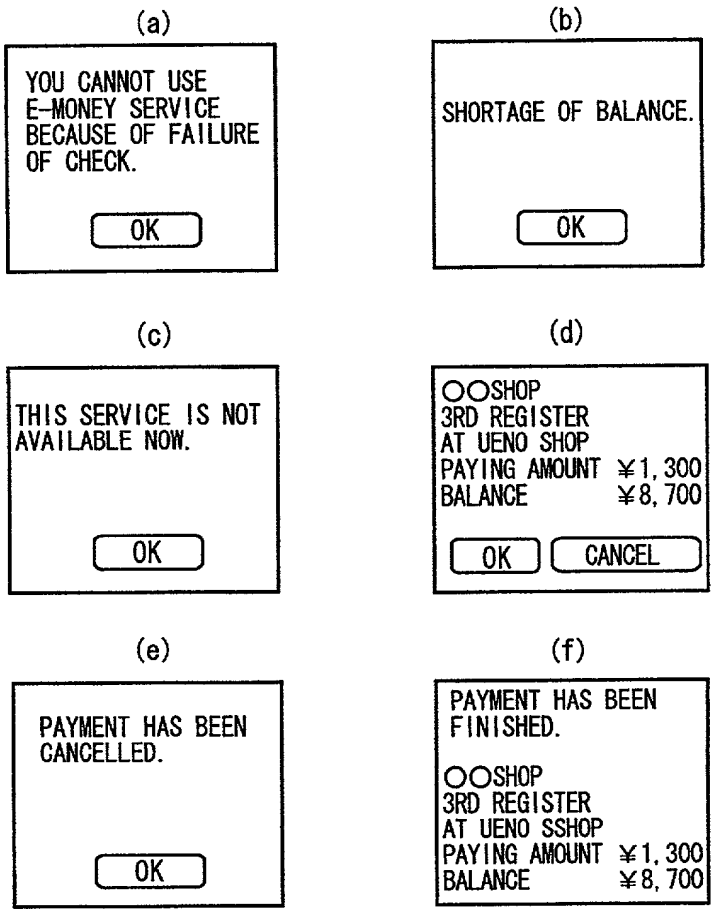

FIG. 25

NI-0002

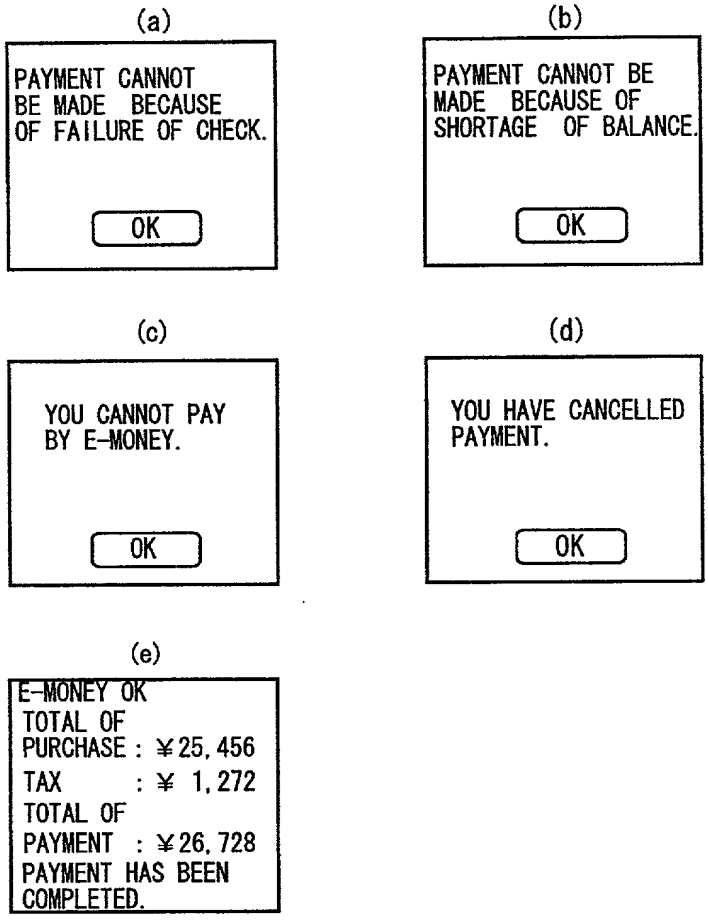

FIG. 26

NI-0002

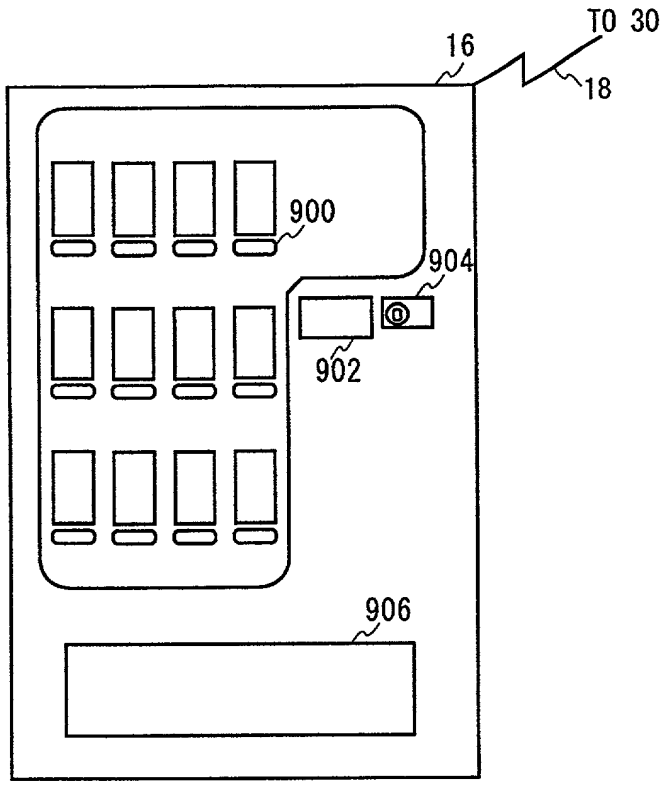

FIG. 27

NI-0002

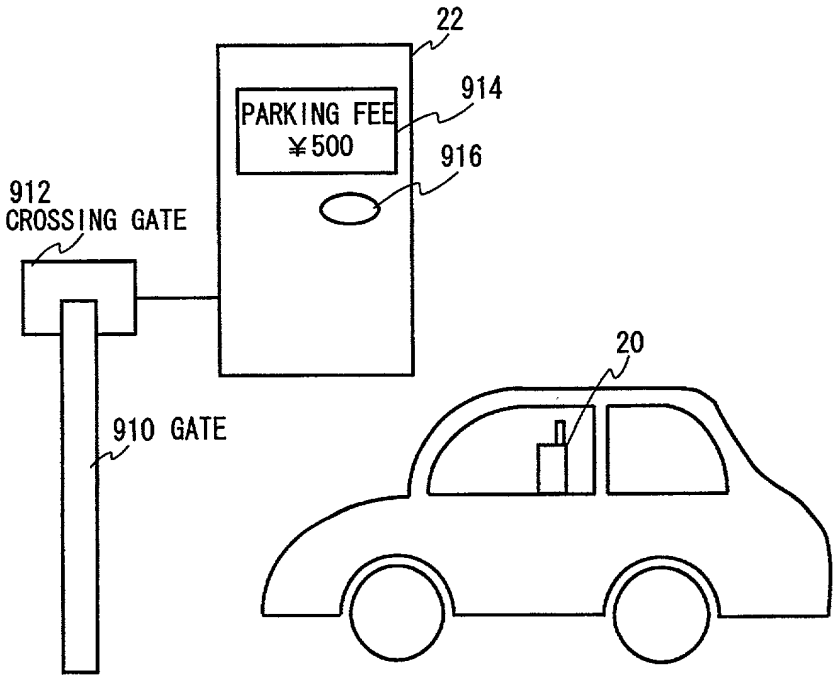

FIG. 28

NI-0002

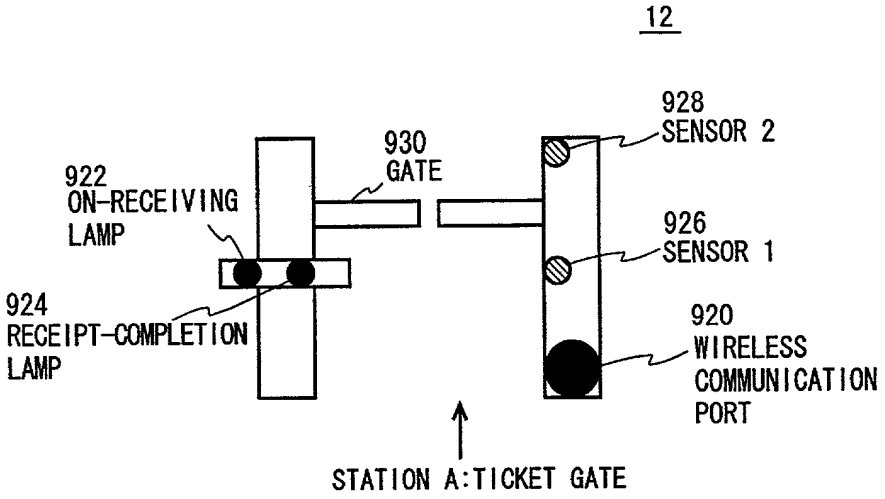

FIG. 29A

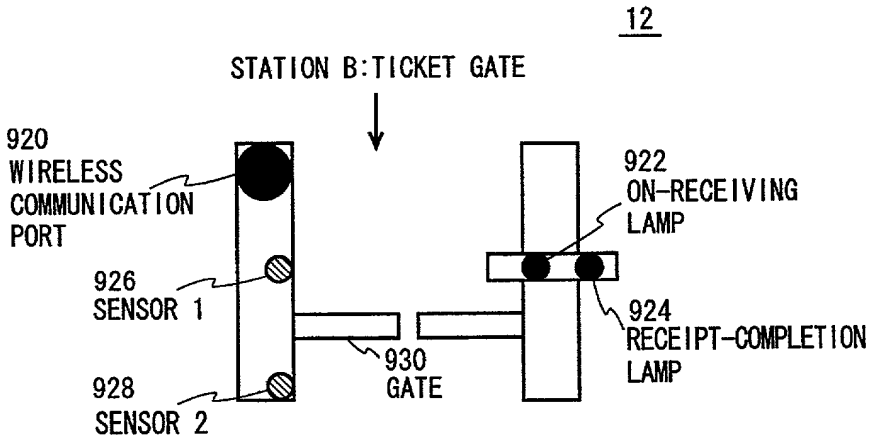

FIG. 29B

NI-0002

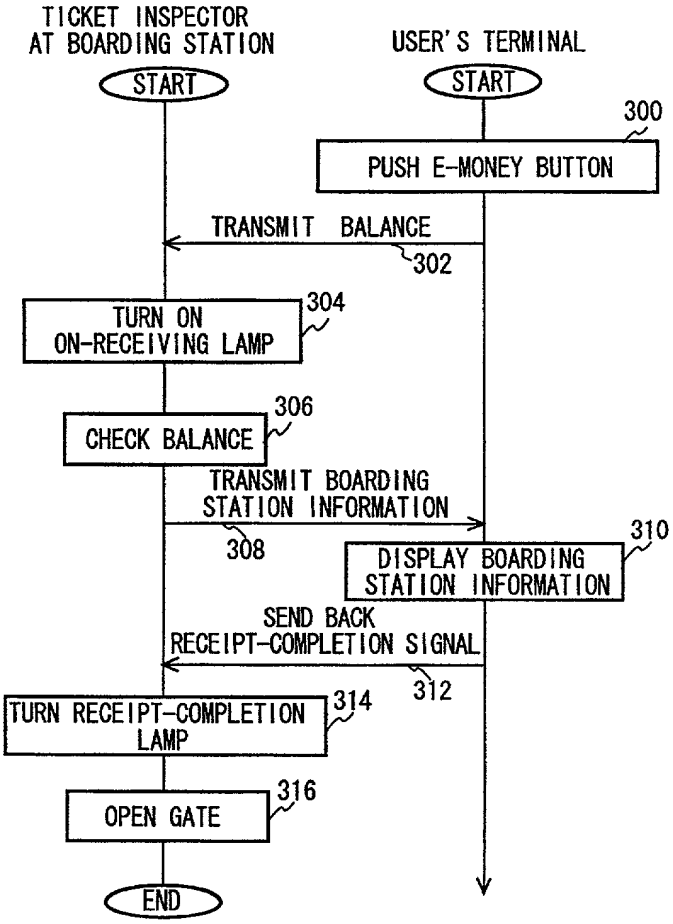

FIG. 30

NI-0002

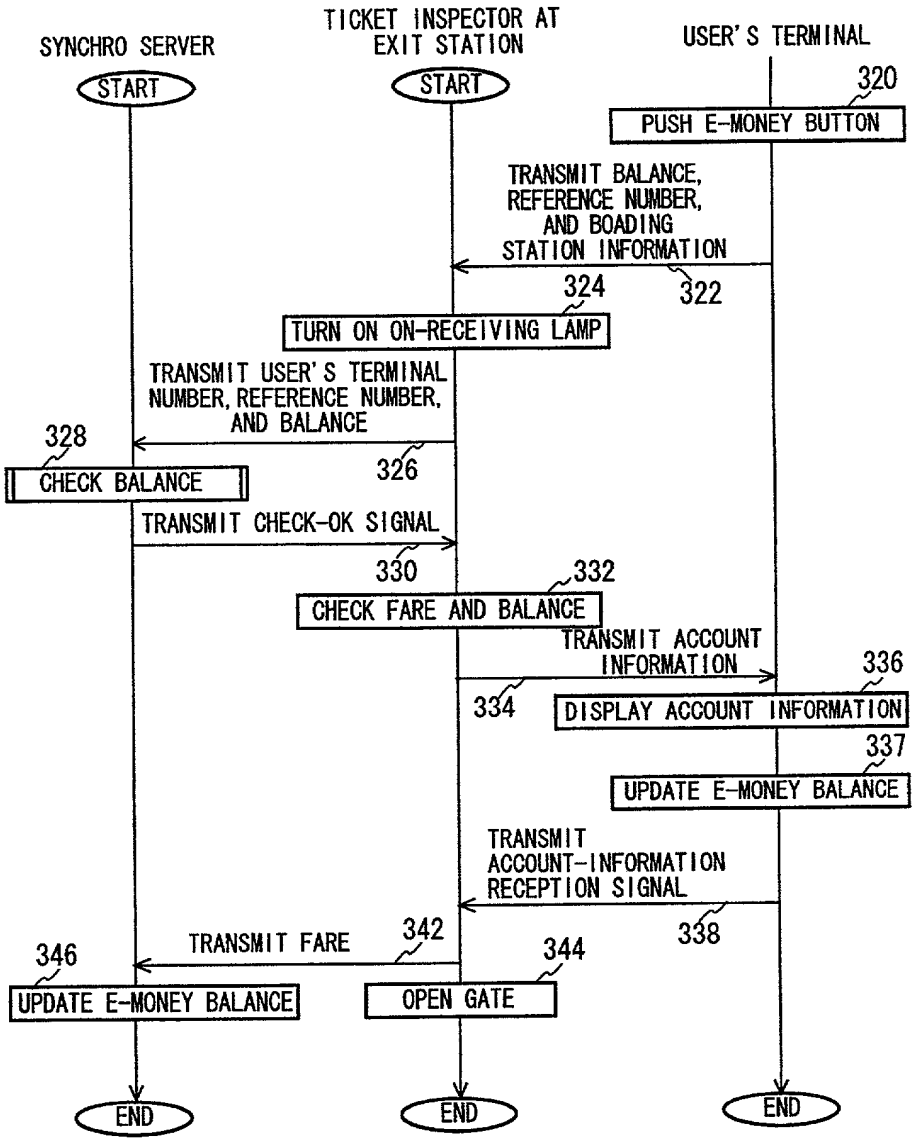

FIG. 31

NI-0002

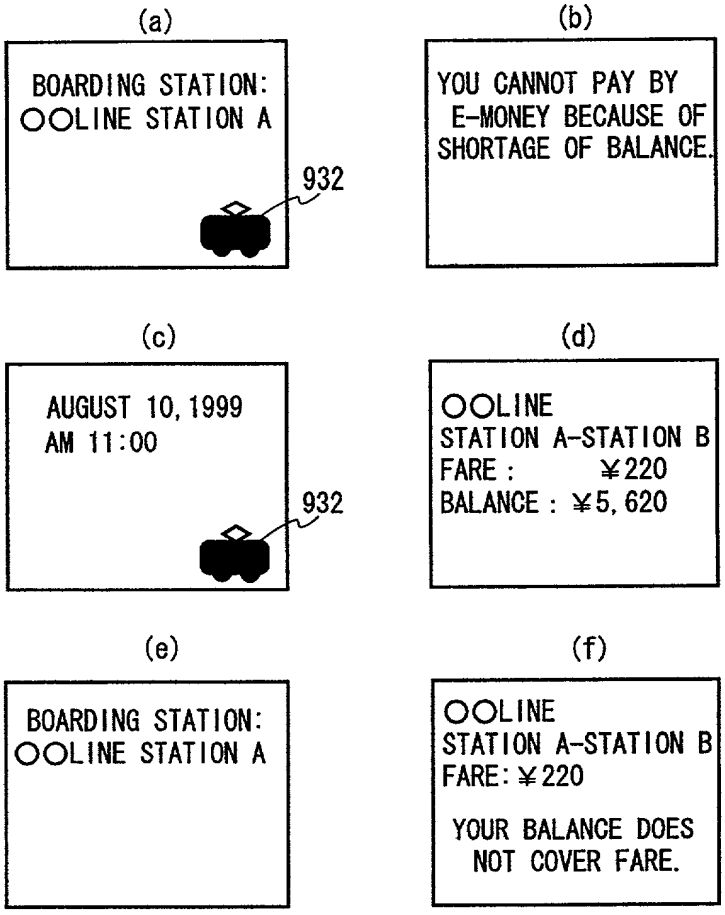

FIG. 32

NI-0002

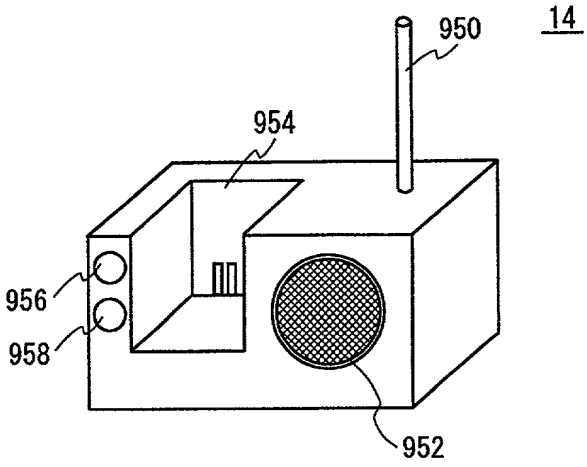

FIG. 33

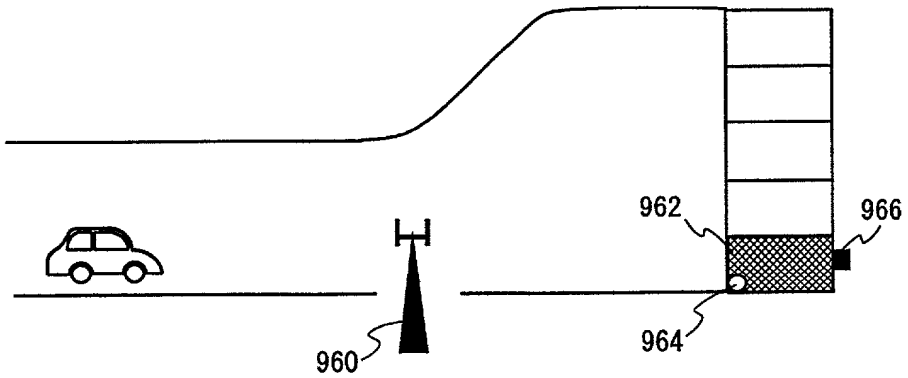

FIG. 34

NI-0002

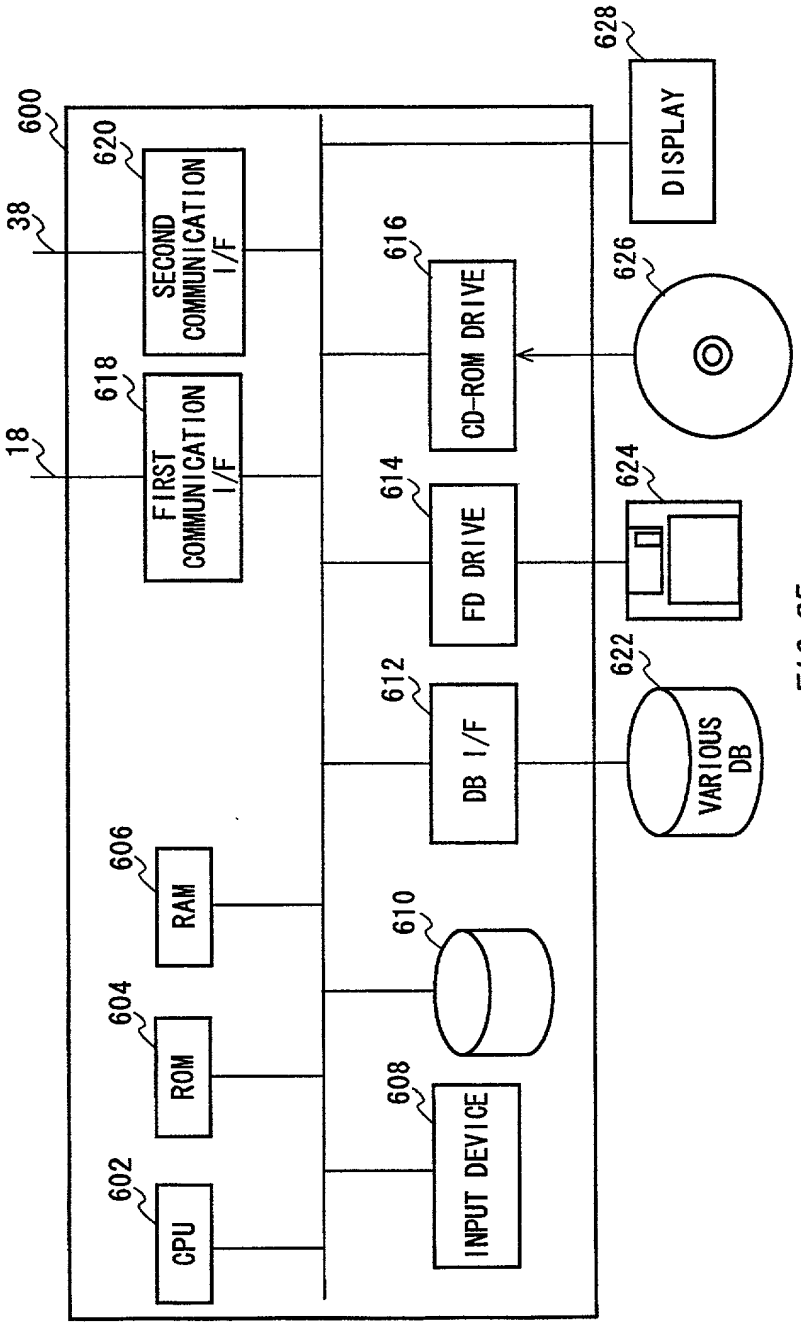

FIG. 35

NI-0002